

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

GRADUATE SCHOOL OF NURSING

Course Syllabus

Course Title:	Pharmacology for Nurse Practitioners – Clinical Correlations
Course Number:	GSN 0630
Credits:	Ongoing 4 Credit
Prerequisites or Taken Concurrently:	Health Assessment, Physiology, Pharmacology for Nurse Practitioners - Didactic
Placement:	Spring, 2002
Course Coordinators:	Diane Seibert, CRNP (Traditional Students) and Captain Bonita Pylar, CFNP (VA/DoD Students)

Course Description:

The purpose of this course is to assist nurse practitioner students in developing the high-level clinical decision-making skills required by nurses functioning in an advanced practice role. A strong foundational knowledge of pharmacologic basics, physiology, physical assessment, differential diagnosis and patient management skills is essential in successfully applying pharmacologic principles to “real world” medical problems. The students will be given common clinical case scenario's and will be asked to develop a comprehensive differential diagnosis as well as medical and pharmacologic management plans. They will be asked to present their patient to the class in the form of a “clinical correlation”. As a major objective of this portion of the course, students will be asked to demonstrate their ability to assess a patient's initial level of knowledge, motivation to learn, types of teaching strategies and present how to measure effectiveness of learning

A major component of this portion of the course will be to develop an understanding of prescription writing principles. A 2-hour lecture on prescription writing basics, schedule drug details and prescription writing ethics will be offered. In addition, students will be asked to research the state prescription laws of the state in which they will be applying for NP licensure.

Course Rationale

Pharmacology includes the elucidation of molecular mechanisms of drug response, the development of new drugs and the formulation of clinical guidelines for safe and effective use to include drugs in therapy or prevention of disease states and in relief of symptoms. This course provides this knowledge and is essential for Advanced Nurse Practitioners.

Course Objectives:

Detailed objectives designed to meet the above domains are described below. The student will:

- A. Utilize general principles of pharmacology and their application in the safe administration and monitoring of drug therapy.
 - 1. Define pharmacokinetic process of absorption, distribution, metabolism and excretion and factors that alter pharmacokinetics.
 - 2. Identify the concept of and potential for drug interactions.
 - 3. List significant adverse drug reactions and appropriate interventions.
 - 4. Describe issues related to bioavailability and bioequivalence of different drugs.
 - 5. Describe the differences between Schedule I-V drugs.
 - 6. Write a complete, clear and accurate prescription
- B. Describe the major classifications, action and side effects of drugs and chemotherapeutic agents in current medical treatments and drug therapy for selected disorders.
 - 1. Identify the indications and rationale for pharmacotherapeutic agents.
 - 2. Contrast drugs used to treat individuals with specific conditions based on factors such as pharmacokinetics, cost, genetic characteristics, etc.
 - 3. Analyze the relationship between pharmacodynamic mechanisms and physiologic responses
 - 4. Describe essential client education for expected effects, potential adverse effects, proper administration and cost of medications
 - 5. Determine correct dosages, dosage form, route and frequency of administration of medications based on relevant individual client characteristics (e.g., age, culture, gender and illness).
 - 6. Identify appropriate monitoring for specific drugs
 - 7. Describe ethical and legal standards and ramifications of pharmacotherapeutics.
- C. Demonstrate understanding of the teaching-learning process required in the nurse practitioner's role.
 - 1. Is able to assess patient's learning needs.
 - 2. Can utilize multiple teaching strategies to present information.
 - 3. Understands how to evaluate a patient's learning.
- D. Describe State Board of Nursing requirements for Advanced Practice Nurses in various states.
 - 1. Identify state requirements related to pharmacology curricular content.
 - 2. Describe state written agreement requirements
 - 3. Discuss state mandated clinical practice supervision requirements.

<u>GSN Terminal Objectives*</u>	<u>NONPF Domains*</u>
1. Consultation 1A 1B	Domain 1: Management of Client Health/Illness Status A 1, 2, 3, 4 B 1-7
2. Leadership/Advanced Role 2A 2B 2C 2E	Domain 2: The Nurse-Client Relationship B 4 C 1, 3
3. Teaching and Education 3A	Domain 3: The Teaching-Coaching Function B 4 C 1, 2, 3
4. Research 4A	
5. Clinical Practice 5A 5B 5C 5D	Domain 6: Monitoring and Ensuring the Quality of Health Care Practice A 3,4 B 7
6. Readiness 6A 6B 6C	
*See GSN Terminal Objectives for details related to number/letter	*Detailed Pharmacology objectives which fall under each domain

Teaching Methods

Lecture, Student Presentations, Student Investigation of State Practice Acts.

Course Requirements:

1. Attendance at all class sessions with quality participation and preparation.
2. Presentation of selected case incorporating all required elements

Student Evaluation:

Students will prepare and present one assigned clinical correlation to the class 15%

State Practice Act Assignment 5%

Textbooks:

Required:

McKenry, L. and Salerno, E. (1998), Pharmacology in Nursing, 20th Ed., Mosby.

Katzung, B. (1998), Basic and Clinical Pharmacology, 7th Edition, Appleton & Lange.

Schwinghammer, T. L. (1997), Pharmacotherapy, A patient-focused approach, Appleton & Lange.

Wells, B. G., DiPiro, J.T., Schwinghammer, T.L. and Hamilton, C.W. (1998), Pharmacoltherapy Handbook, Appleton & Lange.

(Revised September 2001)